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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,358

01/12/2007

Matthias Mersmann

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7590

06/25/2008

GREER, BURNS & CRAIN
300 S WACKER DR
25TH FLOOR
CHICAGO, IL 60606

EXAMINER

JUETTNER, ANDREW MARK

ART UNIT

PAPER NUMBER

3749

MAIL DATE

DELIVERY MODE

06/25/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/579,358

Applicant(s)

MERSMANN ET AL.

Examiner

ANDREW M. JUETTNER

Art Unit

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 6/3/2008.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 7, 10-14, and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by US 7,114,612 to Meyer et al. (Meyer).

In Reference to Claims 7 and 14

Meyer teaches a bulk material cooler (see figs. 1, 4-6) where the cooling grate (5) is made up of a number of adjacently arranged elongated bottom elements (planks 10 are arranged side by side, see fig. 6) can move independently of one another (figs. 2 and 3 show operation of planks over time, each moved in an independent manner from the others, in accordance with the walking floor conveying principle). The bottom elements (planks 10) have an upper side with air passage openings (12) for cooling. The underside of planks 10 have air openings for receiving cooling air and have sections 18 for preventing particles from falling through grate (see figs. 4, 5, 13; column 7, lines 27-32).

In Reference to Claims 10 and 17

Meyer teaches the bulk material cooler as claimed in claims 7 and 14 (see rejection of claims 7 and 14 above). Meyer also teaches that the bottom elements (planks 10) are separately by webs lying transversely to the material transporting direction (transverse walls 13 are dimensioned to retain a layer of bulk material there in; column 7, lines 8-13; see figs. 4, 5, 13).

In Reference to Claims 11 and 18

Meyer teaches the bulk material cooler as claimed in claims 7 and 14 (see rejection of claims 7 and 14 above). Meyer also teaches that the gap between adjacent bottom elements (planks 10) is sealed by a sealing profile (47) where the side cheeks (46) of the bottom elements are engaged (see fig. 10; column 9, line 65-column 10, line 5). The sealing profile acts to reduce the sealing gap towards zero.

In Reference to Claims 12 and 19

Meyer teaches the bulk material cooler as claimed in claims 7 and 14 (see rejection of claims 7 and 14 above). Meyer also teaches that the cooling grate over the length and width of the cooler is made of a plurality of bottom elements (planks 10 connected in the longitudinal direction; see figs. 4-6).

In Reference to Claims 13 and 20

Meyer teaches the bulk material cooler as claimed in claims 12 and 19 (see rejection of claims 12 and 19 above). Meyer also teaches the bottom elements (planks 10) rest on rollers (15) which are driven in a reciprocating motion (column 9, lines 55-59). The rollers (15) are located underneath the bottom elements (planks 10; see figs. 4 and 5). The bottom elements (planks 10) will be translated back and forth subject to in particular only a tensile stress.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 8, 9, 15, and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer in view of US Publication 2004/0185408 to Staak et al. (Staak).

In Reference to Claims 8 and 15

Meyer teaches the bulk material cooler as claimed in claims 7 and 14 (see rejection of claims 7 and 14 above). Meyers does not disclose that the bottom elements have a V-shaped profile.

Staak discloses a bulk material cooling grid (see fig. 1) where the grate is made up of shaped profiles (4 and 4') that interact to form a flow channel (5). Staak discloses an embodiment where the profiles form a V-shaped profile where an intermediate space is formed between the legs of the Vs that material to be cooled and cooling gas will occupy.

It would have been obvious to one having ordinary skill in the art at the time of the invention to substitute the cooling grid taught by Staak for the flat planks of Meyer in order to reduce the risk of material penetrating into or falling through the gas flow channels (Staak [0012], lines 9-11).

In Reference to Claims 9 and 16

Meyer teaches the bulk material cooler as claimed in claims 8 and 15 (see rejection of claims 8 and 15 above). Meyer also teaches that the bottom elements are separately by webs lying transversely to the material transporting direction (transverse

walls 13 are dimensioned to retain a layer of bulk material therein; column 7, lines 8-13; see figs. 4, 5, 13).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Foster patents disclose V-shaped bulk material conveyors. Meyer '703 discloses a bulk material conveyor with adjacent conveyor sections. Northcote discloses a V-shaped conveyor grate surface. Splinter discloses a conveyor with sections in a row coupled to together subject in particular only to tensile stress. Bentsen patents disclose common cooling grate configurations. Quaeck discloses a reciprocating floor conveyor with piston drives located underneath the conveyor surfaces.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW M. JUETTNER whose telephone number is (571)270-5053. The examiner can normally be reached on Monday through Friday 7:30am to 5pm Est..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on (571) 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3749

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMJ

/A. M. J./
Examiner, Art Unit 3749

/Steven B. McAllister/
Supervisory Patent Examiner, Art Unit 3749